

SAFETY ELECTRICAL OUTLET AND SWITCH SYSTEM

Abstract of the Disclosure

An electrical outlet and switch system allows snap-in installation and snap-out removal of outlet and switch modules without exposure to high-voltage conductors.

- 5 The system includes an electrical box, a wiring panel, an outlet or switch module and a corresponding face plate. The wiring panel back side has attachment points for a power cable to be routed through a back portion of the electrical box. The wiring panel front side has a fixture configured to accept an outlet or switch module. The wiring panel physically isolates, yet electrically connects the attached power cable and the module.
- 10 Module contacts provide electrical connection to the panel contacts. The panel fixture has protective structures that prevent inadvertent exposure to and short circuiting of the panel contacts.

- The electrical box is configured for internal placement of the wiring panel, allowing electrical box wiring and verification and electrical system activation prior to wall panel construction. The installed wiring panel has a socket configured to accept a standard AC plug, providing a convenient electrical source prior to outlet module installation. The system also includes a shield configured to fit inside the electrical box and to conform to the wiring panel front side, protecting the electrical box and the installed wiring panel during the makeup phase of construction. After wall panels are installed, the modules can be snapped into the electrical box without the aid of a journeyman electrician. Should a module be damaged at a later date, a homeowner or layman can easily remove and replace the damaged module.
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- The electrical box has an associated box mount providing installation to studs during rough framing of a residential or commercial building. The box mount has a stud alignment guide for accurate placement of the electrical box on a wall stud. In conjunction with this stud alignment feature, the electrical box slides relative to the box mount and is removably locked in one of several fixed positions in order to locate the electrical box front face flush with the exterior surface of wall panels having various thicknesses.
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